

REMARKS

This Amendment is in response to the final Office Action dated December 10, 2004 and addresses the rejections included therein.

Pending Claims

The subject application was originally filed with 34 claims. Of these, Applicant cancelled without prejudice claims 1-18, 23, and 25-34 and introduced new claim 35.

In the present Amendment, Applicant has cancelled claims 19-22 and 24 without prejudice to presentation of these claims, or the subject matter recited therein, in this or a later filed case. Applicant has also added newly presented claims 36-47. Applicant asserts that newly presented claims 36-47 do not introduce new matter and consideration of these claims should not require an additional search.

Accordingly, claims 35-47 are now pending in the subject application.

Summary of Office Action

In the final Office Action dated December 10, 2004, the Examiner:

- (1) rejected claims 19-21 and 24 under 35 U.S.C. § 103(a) as being unpatentable over U. S. Patent No. 4,300,878 issued to Ible (“the ‘878 patent”) in view of U. S. Patent No. 5,824,171 issued to Miyazono et al. (“the ‘171 patent”);
- (2) rejected claims 19-21 and 24 under 35 U.S.C. § 103(a) as being unpatentable over U. S. Patent No. 4,274,821 issued to Kierner (“the ‘821 patent”) in view of the ‘171 patent;
- (3) rejected claims 22 and 35 under 35 U.S.C. § 103(a) as being unpatentable over the ‘878 and the ‘171 patent in view of U.S. Patent No. 4,132,756 issued to Ferrentino et al. (“the ‘756 patent”); and
- (4) rejected claims 22 and 35 under 35 U.S.C. § 103(a) as being unpatentable over the ‘821 patent and the ‘171 patent in view of the ‘756 patent.

Rejections of Claims 19-21 and 24 under 35 U.S.C. § 103(a)

Regarding the Examiner's rejections of claims 19-21 and 24 under 35 U.S.C. § 103(a), Applicant has cancelled these claims without prejudice to presentation of these claims, or the subject matter recited therein, in this or a later filed case. Accordingly, these rejections are now moot and Applicant respectfully requests that these rejections be withdrawn.

Rejections of Claims 22 and 35 under 35 U.S.C. § 103(a)

Regarding the Examiner's rejections of claim 22 under 35 U.S.C. § 103(a), Applicant has cancelled this claim without prejudice to presentation of this claim, or the subject matter recited therein, in this or a later filed case. Accordingly, these rejections to claim 22 are now moot and Applicant respectfully requests that these rejections be withdrawn.

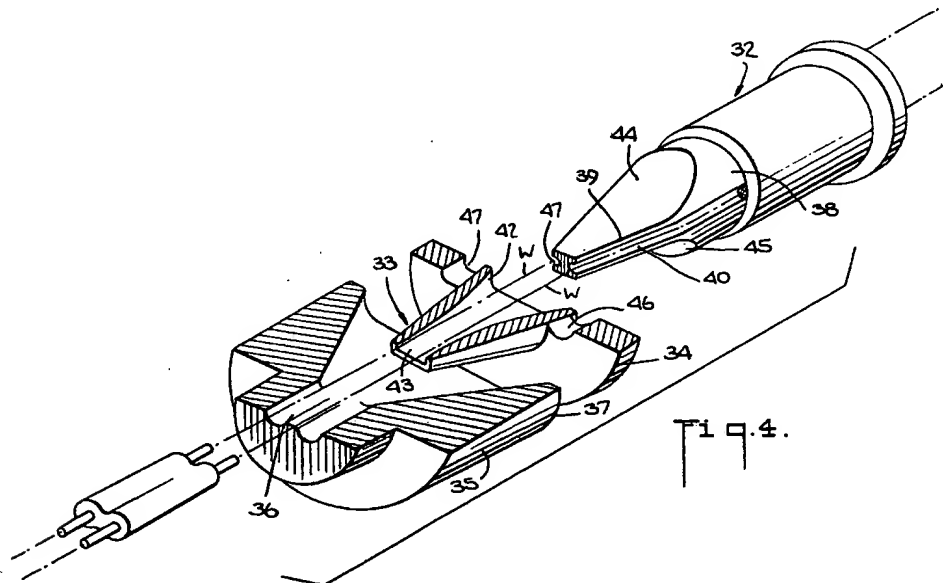
Regarding the Examiner's rejections of claim 35 under 35 U.S.C. § 103(a), the Examiner is reminded that three basic criteria must be met to establish a *prima facie* case of obviousness. First, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Finally, there must be a reasonable expectation of success to modify the reference or to combine reference teachings.

Applicant respectfully asserts that neither the combination of the '878 patent, the '171 patent, and the '756 patent nor the combination of the '821 patent, the '171 patent, and the '756 patent (collectively "the combined references") disclose or suggest each and every limitation recited in claim 35 as amended. For example, the combined references fail to disclose or suggest a passage having a rectangular cross-sectional shape that is "configured to define the position and spacing of the reinforcement elements of one of the sets of reinforcement elements in the reinforcement ply material" as recited in claim 35 as amended.

The Examiner appears to admit that the '878 patent and the '171 patent fail to teach or suggest passages that have a rectangular cross-section. However, the Examiner contends that the '756 patent discloses a passage having a rectangular cross-section for "producing force components so that the elements maintain pre-established distances" and, thus, it would have been obvious to combine the '878 patent and the '171 patent with the '756 patent to arrive at the

claimed invention. Applicant respectfully disagrees with the Examiner's contention that the '756 patent discloses a passage having a rectangular cross-section for "producing force components so that the elements maintain pre-established distances" and, thus, the combined references fail to teach or suggest each and every limitation of claim 35 as amended.

The '756 patent discloses an extrusion head for making telecommunication cable in which optical fibers are uniformly spaced.¹ As shown below in **Fig. 4** of the '756 patent, the extrusion head includes a mandrel 32, a conical die 33, and a die-seating element 35. To guide wires **W** through the conical die 33, the mandrel 32 includes a converging portion 39 having two grooves 40 and 41 (incorrectly identified as 47 in **Fig. 4**) provided therein. The converging grooves 40 and 41 produce components of force on the wires **W** that "compel them to travel closely adherent to the race of the grooves 40 and 41." The conical die 33 includes an inner surface having an upstream conical portion 42 and a downstream duct portion 43. Due to the curvature of the path followed by the wires **W** during their passage from the upstream conical portion 42 to the downstream duct portion 43 of the conical die 33, the wires **W** are subjected to force components that maintain them at pre-established distances as they exit the mandrel 32.



Although the duct portion 43 of the conical die 33 has a rectangular cross-section, it does not establish the position and spacing of the wires **W** in the cable. Instead, the position and

¹ Thus, it may be noted that the '756 patent is not directed to an apparatus for making reinforcement ply material having a plurality of reinforcing elements embedded therein, but rather a single cable including two or four optical fibers.

spacing between the wires **W** is dictated by the lateral spacing between the grooves **40** and **41** of the mandrel **32**. At most, the duct portion **43** cooperates with the grooves **40**, **41** in the mandrel **32** to assist in guiding the wires **W** through the die **33**. Accordingly, based on the foregoing, Applicant requests that the Examiner withdraw these rejections and submits that claim 35 as amended, and the claims that depend therefrom (i.e., claims 36-38) are in condition for allowance.

New Claims

As discussed above, Applicant has added newly presented claims 36-47. Since newly presented independent claim 39 includes a passage having a rectangular cross-sectional shape that is “configured to define the position and spacing of the reinforcement elements of one of the sets of reinforcement elements in the reinforcement ply material,” Applicant submits that this claim, and the claims that depend therefrom (i.e., claims 40-41), are allowable for the same reasons discussed above.

Regarding independent claim 42, Applicant asserts that the combined references fail to disclose or suggest passages “configured to define the position and spacing of the reinforcement elements of one of the sets of reinforcement elements in the reinforcement ply material, each passage including a front end having a cross-section and a rear end having a cross-section, the cross-section of the front end of each passage having substantially the same shape as and being dimensioned substantially similar to the cross-section of the rear end of each passage.” More specifically, the passage in the die disclosed in the ‘756 patent lacks first and second ends that have substantially the same shape and dimensions. Therefore, Applicant submits that this claim, and the claims that depend therefrom (i.e., claims 43-47), are allowable.

Conclusion


In view of the remarks above and the amendments presented herein, it is believed that claims 35-47 are in condition for allowance and notice to such effect is respectfully requested. If the Examiner thinks a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned at the phone number provided below.

The Commissioner is hereby authorized to charge any necessary additional fees, or credit any overpayment, to Deposit Account No. 02-2051, referencing Docket No. FIREP9912142US.

Respectfully submitted,

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